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ASSESSING THE IMPACT OF SOCIAL MEDIA ON MENTAL HEALTH AMONG UNDERGRADUATE NURSING STUDENTS

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Abstract

Background: *Social media is increasingly part of the lives of university students, offering them a chance to communicate, entertain and learn. But overuse or problematic use might be linked with psychological distress, such as stress, anxiety and low self-esteem. Students in the undergraduate program may be at greater risk due to their academic demands and their clinical duties.*

Objective: *To identify the usage pattern of social media and evaluate the perception of undergraduate nursing students regarding the effect on mental health such as stress, anxiety and self-esteem that social media has.*

Methods: *The study was of descriptive cross sectional type with undergraduate nursing students of University of Lahore, Pakistan. The participants were recruited using a convenience sampling technique. The sample size was expected to be 278 students and the detailed frequency tables showed 277 valid answers. The data were collected by using a structured questionnaire which included items related to the demographics, social media usage patterns, self-reported mental health indicators and perceived impacts of social media. Data was analysed using descriptive statistics, with frequencies and percentages reported.*

Results: *The majority of the participants were between 20-25 years of age (93.9%). The detailed demographic tables revealed that the male population was 70.0% and the BSN program had 83.0% female students. As regards social media, 40.1% reported using social media 3-5 times a day, 17.0% were using social media for more than four hours a day. The main purpose*

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of social media usage was entertainment (47.3%), socialization (26.4%) and academic purposes (25.3%). Moderate self-esteem was reported by 51.6%, sometimes 31.8% and always 26.4% of the participants reported anxiety. Overall, 55.6% reported that social media impacted their mental health. Increased stress, decreased self-esteem and increased anxiety were the most commonly reported effect selected together. In addition, 47.3% indicated that they would decrease their social media consumption to have a positive effect on mental health.

Conclusion: *Undergraduate nursing students used social media and the main uses were entertainment and social interaction. The psychological effects were reported to be diverse such as stress, anxiety and changes in self-esteem. The results showed that using social media and being mindful about the mental health of nursing students is important. Additional analytical study is needed to determine statistical associations between exposure to social media and mental health outcomes.*

1. Introduction

Social media can help with emotional support, communication and delivery of educational information. Nursing forums online can also facilitate group learning, networking and sharing of clinical knowledge. But too much involvement can lead to sleep disorders, compare and contrast others, decreased focus and psychological distress. A systematic review of undergraduate nursing student use of the social media found that social media engagement was linked with psychological distress, primarily anxiety and depressive symptoms, but the evidence was mainly from cross-sectional studies [1].

The link between social media and mental wellbeing is a complicated one. Studies indicate that problematic social media use is better correlated with negative psychological outcomes than overall Internet use. A systematic review and meta-analysis revealed a relationship between high social media use, depression and anxiety in adolescents and young adults [2]. In a similar review, there were also weak correlations between general SBM use and mental health measures and stronger correlations between problematic SBM use and depression, anxiety, and worse mental health [3].

The world of nursing education in Pakistan has seen a significant shift towards digital communication and learning platforms among students. It is important to understand their social media use and the perceived impact on mental health to be able to develop suitable educational and prevention strategies. The use of social media and depression has been previously studied among nursing students in Pakistan, highlighting the need to investigate the topic in the context of nursing education in Pakistan [4,5]. Although there has been an increase in the interest in this topic, there is a need for institution-specific evidence related to the use of social media and mental health for undergraduate nursing students. So, the present study was carried out at the University of Lahore to evaluate the usage pattern of social media and the perception of the student regarding the impact of social media on the stress level, anxiety level, self-esteem and overall mental health of the students.

2. Materials and Methods

This study employed a descriptive cross sectional research design to evaluate social media usage pattern and self-reported indicators of mental health among undergraduate nurses at one particular time. This design was appropriate for obtaining data on the social media usage and perceptions of mental health impacts among participants, as well as demographic characteristics.

This study was carried out at University of Lahore Lahore, Pakistan. The university was chosen because there were undergraduate nursing

students who routinely use social media platforms. The study sample was the nursing students of the University of Lahore. The study material included students from the Bachelor of Science in Nursing (BSN) program and Post-Registered Nurse (Post RN). The expected sample size was 278 individuals, which was derived from the cross-sectional survey approach, 95% confidence level and 5% margin of error. Available and willing participants were recruited using a convenience sampling technique.

The detailed frequency tables presented in the Appendix show that there were 277 valid responses across the detailed frequency tables generally. This discrepancy should be ironed out prior to final publication. All the students of nursing from University of Lahore, aged 18–40 years. Who have access to social media at least once a day were included in the study. The students that did not use social media on a daily basis and who were not enrolled.

A structured questionnaire was used with four sections being data collected: Part 1: Demographic attributes: This section contained age, gender, degree program and year of study. Part 2: Social Media Usage Patterns: The frequency of social media use, how much time spent per day and the platforms used were evaluated as well as the most common reason for using social media, which included entertainment, socializing and academic activities. Section III: Listening for signs of mental health: Self-report of stress, anxiety and self-esteem were measured in this section by the responses given to the questions on the questionnaire. Part 4: Mental health perceived effects: The focus of this section was to determine participants' perceptions of the impact of social media on levels of stress, anxiety, self-esteem and mental health, and how willing they were to limit their social media consumption.

After ethical approval, the students who were eligible were approached by making speeches and making the recruitment process within the university. The objective of the research was explained and informed consent obtained prior to participation. Questionnaires were in paper or secure online format. The participants filled the questionnaire independently and completed questionnaires were collected for analysis.

3. Results

The detailed frequency tables show 277 valid responses. Most participants were aged 20–25 years (93.9%), followed by those aged 25–30 years (5.4%) and 30–35 years (0.7%). There were 194 male and 83 female participants, with a gender distribution of 70.0% male and 30.0% female. As to the educational program, 230 participants (83.0%) were pursuing a BSN and 47 (17.0%) were enrolled in the Post RN. The first year students (36.1%) were the largest group followed by second year students (23.5%), fourth year students (22.4%) and third year students (18.1%).

The results showed that social media was used often by the participants. Overall, 111 students (40.1%) reported using social media media 3-5 times a day and 42 (15.2%) reported using social media more than 5 times per day. Around 22.4% said that they use social media between 1-2 times a day and 22.4% said they used it less than once a day. With regard to the duration of use, 118 (42.6%) reported using social media for 1-4 hours per day and 47 (17.0%) reported using social media for more than four hours per day. Ten of the participants (3.4%) spent less than one hour per day. The most common primary use for social media was for entertainment (131 respondents, 47.3%). 73 participants (26.4%) reported socializing, and 70 (25.3%) reported the main use of social media was for academic purposes.

Several social media platforms were mentioned by the participants. The most common platform was WhatsApp with 245 responses (88.4%), with Instagram coming in next with 188 (67.9%), Facebook with 100 (36.1%) and Snapchat with 122 (44%). The percentages do not add up to 100% since participants were allowed to choose more than one platform. Regarding self-esteem, 143 participants (51.6%) rated their self-esteem as moderate, 57 (20.6%) as low, and 53 (19.1%) as high. Twenty-four additional participants (8.7%) reported not knowing how to assess their self-esteem. Regarding anxiety, 88 participants

(31.8%) reported feeling anxious sometimes, 73 (26.4%) always, 51 (18.4%) often, and 65 (23.5%) rarely.

Overall, 154 (55.6%) participants said that social media had a negative impact on their mental health. Sixty-one (22.0%) responded "maybe," while 53 (19.1%) reported no effect and nine (3.2%) were unsure. 86 participants (31.0%) chose increased stress, decreased self-esteem and increased anxiety in response to the question of how social media affected their mental health. Increased stress was the most common option, selected by another 46 (16.6%) and decreased self-esteem was selected by 19 (6.9%). But 31.0% of the people (86) said they were not aware of the impact of social media on mental health. When asked if they would like to decrease their social media use to improve mental health, 131 (47.3%) said "yes" and 96 (34.7%) said "maybe." Thirty-three participants (11.9%) were not willing to decrease their usage and 17 (6.1%) stated that they did not know.

Table 01: Demographic characteristics of participants (n = 277)

Characteristic	Category	Frequency (n)	Percentage (%)
Age	20–25 years	260	93.9
	25–30 years	15	5.4
	30–35 years	2	0.7
Gender	Male	194	70.0
	Female	83	30.0
Degree program	BSN	230	83.0
	Post RN	47	17.0
Year of study	First year	100	36.1
	Second year	65	23.5
	Third year	50	18.1
	Fourth year	62	22.4

Table 02: Social media usage patterns (n = 277)

Variable	Category	Frequency	Percentage
Frequency of use	3–5 times daily	111	40.1
	1–2 times daily	62	22.4
	Less than once daily	62	22.4
	More than 5 times daily	42	15.2
Daily duration	1–4 hours	118	42.6
	1–2 hours	82	29.6
	More than 4 hours	47	17.0
	Less than 1 hour	30	10.8
Primary purpose	Entertainment	131	47.3
	Socializing	73	26.4
	Academic purposes	70	25.3
	Other/combined responses	3	1.1

Table 03: Social media platforms used by participants

Platform	Participants reporting use	Percentage of participants
WhatsApp	245	88.4
Instagram	188	67.9
Snapchat	122	44.0

Facebook	100	36.1

Table 04: Self-reported mental health indicators (n = 277)

Variable	Response	Frequency	Percentage
Self-esteem	Moderate	143	51.6
	Low	57	20.6
	High	53	19.1
	I don't know	24	8.7
Anxiety frequency	Sometimes	88	31.8
	Always	73	26.4
	Rarely	65	23.5
	Often	51	18.4

Table 05: Perceived overall impact of social media on mental health (n = 277)

Response	Frequency (n)	Percentage (%)
Yes	154	55.6
Maybe	61	22.0
No	53	19.1
Not sure	9	3.2

Table 06: Self-reported ways social media affects mental health

Reported response	Frequency (n)	Percentage (%)
Increased stress, decreased self-esteem, and increased anxiety	86	31.0
I don't know	86	31.0
Increased stress	46	16.6
Decreased self-esteem	19	6.9
Increased anxiety	11	4.0
Other combinations	29	10.5

Table 07: Willingness to reduce social media usage (n = 277)

Response	Frequency (n)	Percentage (%)
Yes	131	47.3
Maybe	96	34.7
No	33	11.9
I don't know	17	6.1

4. Discussion

The present study evaluated the pattern of social media use and self-reported mental health indicators among the nursing undergraduate students of University of Lahore. The results showed that social media usage was very high among the participants, where entertainment, socializing and academic activities were the main uses of social media. A majority of the respondents felt that social media had an impact on their overall mental health, but some felt that it had a minor impact and others felt that it had a significant impact.

The study revealed that 40.1% of the respondents had used social media three to five times a day, whereas 15.2% used more than five times a day. In addition, 17.0% said they spend more than 4 hours a day on social media. The results show that

the nursing students who participated in the study are very engaged with digital platforms.

The purpose of most of the social media use (47.3%) was for entertainment. Social media was used for academic purposes (25.3%), suggesting it was being used for recreational and academic purposes. This dual function aligns with the wider literature that outlines how social media is becoming more enmeshed in nursing education and students' interactions [1,6].

WhatsApp came out as the top platform, followed by Instagram, Snapchat and Facebook. Opportunities for social support and information sharing may be available due to the ubiquity of communication-oriented platforms. The possible impact of these platforms, however, will depend on the way they are used, and the extent to which their use disrupts daily activities.

Over half of the participants (55.6%) felt that social media had a negative impact on their mental health. The effects that were reported were that there was an increase in stress, self-esteem decreased, and anxiety increased. Selected by 31.0% of participants was the mix of increased stress, decreased self-esteem, and increased anxiety. This discovery implies that a few students felt that there were several psychological impacts of social media use.

The findings align with the findings of a systematic review conducted on undergraduate students in nursing that found a relationship between social media and psychological distress mainly anxiety and depression symptoms [1]. The result, however, only suggest that social media use is a cross-sectional study and is not a definitive finding of whether the use of social media occurred before the psychological distress or if the students who had psychological distress were more inclined to make use of social media. The results of the study revealed that 51.6% of the participants had moderate self-esteem, 20.6% had low self-esteem and 19.1% had high self-esteem. This shows that there is a variation in the self-esteem of the respondents. Social media can have an impact on self-esteem in several ways, including social comparison, viewing idealized images, and receiving feedback online. Meanwhile, nurturing relationships and positive virtual communities can help foster confidence and belonging. Researchers have found that the nature and level of engagement with social media, rather than the amount of time spent online, can have an impact on mental health [2,3].

The present research did not measure the social comparison or specific online experiences, so it is important to treat the social comparison mechanisms as potential explanations rather than actual findings. The study revealed that 31.8% of the respondents sometimes experienced anxiety and 26.4% of the respondents experienced anxiety always. Additionally, 39.4% said they felt more anxious as a result of social media and 34.3% said “maybe.” The results suggest that an anxiety-relevant self-reported concern was relevant for the study participants. In contrast, problematic social media use and anxiety were found in systematic reviews with young adults [2, 3]. However, the current responses to the questionnaire are not to be interpreted as clinical anxiety diagnoses. Nearly half of the participants (47.3%) said they would like to spend less time on social media to benefit their mental health, and 34.7% said “maybe”. This means that a lot of students were willing to change their digital lifestyles.

Interventions could target healthful social media habits, time management and sleep hygiene, digital wellbeing and psychological distress awareness. Mental health support and digital health education can also be added to student support programs in nursing institutions. The results will impact nursing education and student wellness. Academic responsibilities, clinical training and personal activities are all areas in which effective strategies are needed for nursing students. Educational awareness initiatives could help pupils identify common online behaviors that may be detrimental and foster more positive online interactions. Aristotle's definition of "happiness" is a central subject of the course. The subject of the course is Aristotle's definition of "happiness" which can be used to promote the responsible use of social media without diminishing its educational value. Psychological

needs among nurses could also be addressed through counseling services, peer support and student centered mental health interventions.

5. Conclusion

The present study aimed at investigating the pattern of social media usage and perceived effect on mental health status among the undergraduate nursing students of the University of Lahore. Social media was used and the top reasons were to watch entertainment and keep up with socializing. Over half of the participants felt social media had a negative impact on their overall mental health, and common concerns included increased stress, decreased self-esteem, and increased anxiety. The results also revealed a large number of respondents who were willing to limit their social media to benefit their mental well-being. These findings underscore the need for schools to encourage well-rounded digital usage, mental well-being education, and a positive learning atmosphere for nursing students. Notwithstanding the descriptive and cross-sectional design of the study, results cannot be used to infer causation between social media and mental health. Further studies using validated instruments, larger representative samples, analytic or longitudinal design are recommended.

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